

SealLoader 4000 - Development of a New Generation



Schleuniger is one of the world's leading suppliers of wire processing machines. Their extensive knowledge is especially apparent in the field of extreme seals and insulating bushings. After several steps in the highly automated wire processing system, these seals are quickly and accurately applied to the wire. To keep abreast of current market requirements, a new generation of SealLoader has been developed as an integral component of a CrimpCenter.

New motorized generation offers higher quality

In cooperation with the team from Schleuniger, konplan developed the concept and the mechanics for the new SealLoader. The pneumatically operated pick-and-place module was replaced with a new design using a closed-loop stepper motor controller. The newly motorized Z-axis is software-controlled and allows very fine tuning of the transfer pin while also increasing the process speed. This maximizes production throughput and improves the quality of the seal insertion process which can be performed with one hand thanks to the patented quick-release fasteners. The new SealLoader 4000 can be integrated with fully automatic wire processing machines from Schleuniger and third-party suppliers. In addition, the newly developed «SealKit Carrier» also enables the processing of seal applications from other manufacturers.

Increase of performance and flexibility

The new generation SealLoader 4000 offers the best performance and highest quality. It is more user-friendly and easier to maintain than earlier generations. The machine performance is up to 15% higher than previous Schleuniger seal stations and offers more flexibility since it is independent of the manufacturer. The optimized seal insertion process provides ease of operation without the need for tools and guarantees very short changeover times. Unparalleled flexibility in seal assembly makes production planning easier and allows continued use of existing seal kits and fully automatic wire processing machines.

Result

- Up to 15% higher performance
- New, improved machine generation leads to competitive advantage for customer
- Ability to accommodate third-party seal carriers

Methodology & Technologies

- Mechanics
- Pneumatics
- Electric motors
- Sensors

Scope of Services

- Mechanical development
- Assembly concept
- Assembly and prototype testing



36 months



1 employee (konplan)
5 employees (customer)



Idea generation to series production ready/market launch

Our customer

 **Schleuniger**

Further information
www.konplan.com